## PROCEEDINGS OF THE

## BIOLOGICAL SOCIETY OF WASHINGTON



## A NEW SPECIES OF FREE-TAILED BAT (GENUS EUMOPS) FROM BRAZIL

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Included in a group of bats received by the U. S. National Museum as an exchange from the Museu Paulista, São Paulo, Brazil, in 1904, is a specimen apparently distinct from named species. It may be recognized by the following description:

Eumops amazonicus sp. nov.

Holotype.—U.S.N.M. no. 123827; young adult, skin and skull (digital epiphyses ossified and teeth slightly worn); collected in 1899, by "Bicego"; Manáos, Amazonas, Brazil; Museu Paulista number 365a.

Distribution .- Known only from the type locality.

Description.—Tooth formula, 1/2-1/1-2/2-3/3=30. Upper incisors in contact with one another at base but tips divergent, one millimeter apart; cingula of incisor and canine separated by 0.25 mm. space; upper canine small, both in height and in diameter at cingulum;  $P^1$  in toothrow, not crowded, touching canine but not touching  $P^4$ ;  $P^4$  relatively small and compact, outline at cingulum not showing bulges of cusp bases;  $M^3$  with third commissure almost as long as second and metacone almost as high as mesostyle. Mandibular toothrow not excessively crowded; incisors arranged in semicircle, only slightly imbricated; talonid of  $M_3$  with two prominant cusps. Mesopterygoid fossa broad anteriorly, narrowing posteriorly; basisphenoid pits large, deep, and well defined, considerably exceeding mandibular fossae in area; palate extending posteriorly about one millimeter beyond level of rear edges of third molars; brain case shallow; rostrum narrow; lachrymal ridges and sagittal and lambdoidal crests only slightly developed.

Lips apparently without wrinkles; tragus small, with rounded tip; auricle probably extending beyond tip of snout when laid forward; keel of auricle, 11.6 mm.; connecting membrane on forehead seemingly about 3 mm. high. Connecting membrane and inner edge of keel, anterior base of forearm, and membrane posterointernal to wrist, hairy. Other parts

of auricle, face, and membranes essentially naked.

Dorsum rich blackish brown, considerably more blackish than Carob Brown; bases of hairs like tips on lower back, paler than tips on nape and upper back; hairs of underparts tricolor, whitish at base and tip, brownish medially, mass effect about Verona Brown (capitalized color terms from Ridgway, Color standards and color nomenclature, 1912).

Measurements (in millimeters).—Greatest length (not including incisors) 17.3, basal length 14.9, zygomatic breadth 10.6±, interorbital breadth 4.0, mastoidal breadth 9.8, depth of brain case (not including auditory bullae) 5.9, maxillary toothrow 6.7, palatal breadth (between

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outer margins of M³) 7.4, post-palatal length (posterior margin of palate to anteroventral lip of forarmen magnum) 7.7, breadth of mesop-

terygoid fossa 2.5, forearm 36, tibia 11.5.

Comparisons.—Eumops amazonicus agrees in all details with Miller's diagnosis of the genus Eumops (Bull. U. S. Nat. Mus., 57:257, 1907). For diagnoses of other species of this genus, see: Sanborn, Jour. Mamm., 13(4):347, 1932; Goodwin, American Mus. Novit., 1075:2, 1940; Benson, Proc. Biol. Soc. Washington, 60::133, 1947; Hall & Villa, Univ. Kansas Publ. Mus. Nat. Hist., 1(22):445, 1949.

Eumops amazonicus is most like E. hansae Sanborn, but is considerably smaller (greatest length of skull 17.3 mm. as opposed to 20.7 mm.; forearm 36 mm. in contrast to 41.5 mm.). Characters of the upper incisors, canine,  $P^4$ ,  $M^3$ , palate, and basisphenoid pits are similar in the two species, and they agree in having the forearm relatively shorter than any other species of the genus. The forearm is about twice the greatest length of the skull in amazonicus and hansae, about two and one-half

times the greatest length in other species.

Eumops amazonicus resembles E. bonariensis (specimens from Asuncion and Villa Rica, Paraguay) in size, but differs from it in many dental and cranial details. E. bonariensis has the upper incisors with less divergent tips; the upper canine larger, almost touching I¹ and P⁴ and forcing P¹ out of toothrow; P⁴ wider and the bases of the cusps bulging at the cingulum; the third commissure of M³ shorter than the second commissure; the lower incisors more crowded; the posterior border of the palate about at the level of the posterior edge of M³; the mesopterygoid fossa narrow anteriorly and broadening posteriorly; the basisphenoid pits small, shallow, and somewhat ill-defined, equaled or surpassed in area by the mandibular fossae; the lachrymal, sagittal, and lambdoidal crests better developed; and the brain case deeper (its depth equal to 43-44 per cent of the basal length in E. bonariensis, 40 per cent in E. amazonicus).

Specimen examined.—The holotype.